

Section C:2

River Corridor

PROJECT MANAGERS

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SUMMARY

The River Corridor Project consists of the following projects: 300 Area Liquid Effluent Facility (LEF) WBS 1.2.3.2, Project Baseline Summary (PBS) WM05; B-Plant, WBS 1.4.1, PBS TP01; 300 Area/Special Nuclear Materials, WBS 1.4.4, PBS TP04; Transition Project Management, WBS 1.4.6, PBS TP12; Accelerated Deactivation, WBS 1.4.8, PBS TP10; 324/327 Facility Transition, WBS 1.4.10, PBS TP08; and Hanford Surplus Facility Program (300 Area Revitalization), WBS 1.4.11, PBS TP14.

PBS WM05 is divided between WBS 1.2.3.1, Liquid Effluents (200 LEF) and WBS 1.2.3.2, 310 TEDF/340 Facility (300 LEF). The 310 TEDF/340 Facility work scope is now included in the River Corridor Project, whereas the Liquid Effluents (200 LEF) work scope has remained in Waste Management. For the purpose of performance analysis, PBS WM05 is reported in its entirety in the Waste Management Project, which has the majority of the work scope and funding incorporated in their baseline.

NOTE: Unless otherwise noted, the Safety, Conduct of Operations, Milestone Achievement, Metrics and Cost/Schedule data contained herein is as of May 31, 2000. All other information is as of June 22, 2000.

Good progress was made toward closeout of the actions required by the B Plant transfer Memorandum of Agreement (MOA). There are a few issues remaining, to include aerosol challenge test of the north filter train and restart of the B Plant exhaust system by July 28, 2000.

Progress continues toward Accelerated Deactivation of the 327 Facility with the removal of Legacy Waste Container Leg 05 and four concrete lined drums of legacy waste buckets. Additionally, seven Lead Lined Drums were loaded with waste buckets, dry storage samples, fissile inventory and pin tubes. The last seven cans of retrievable non-fissile material and four fissile cans were removed from dry storage. All remaining fissile pieces from D Cell (4.0 grams) and E Cell (4.5 grams) were transferred to F cell for consolidation.

Twelve grout containers of the planned seventeen have now been shipped to the Low-level Burial Grounds in the 200 Area. Shipment of this waste is critical to meeting TPA milestone M-89-02, "Complete Removal of 324 Building Radiochemical Engineering Cell (REC) B Cell Mixed Waste (MW) and Equipment," due November 2000.

The Accelerated Deactivation project is making good progress in planning for the disposition of approximately 1,865 metric tons (MT) of Hanford Unirradiated Uranium. Review of the billet Safety Analysis Report for Packaging has been initiated by DOE-HQ for approval. DOE-RL review of the Environmental Assessment has been completed. If funded and regulatory agreement is received, disposition of the Uranium fuel elements will occur in the last quarter of FY 2000. Concurrently, Phase I activities to prepare uranium billets and UO3 T-hoppers for shipment are continuing.

Fiscal-year-to-date milestone performance (EA, DOE-HQ, and RL) shows that four of five milestones (80 percent) were completed on or ahead of schedule and one milestone is overdue. The Milestone Achievement details, found following cost and schedule variance analysis, provide further information on all milestone types.

ACCOMPLISHMENTS

The Dispersible Removal System (DRS) robot has been delivered and tested, and training is complete in support of the 324 B Cell Cleanout. The new robotic crawling device was designed and fabricated by ROV Technologies of Vernon, VA. The DRS will support removal of dispersible contamination from the 324 B Cell sump, trench and floor.

Shipment of the 324 Building's 12th grout container from the 17-container campaign is now complete. Repackaging of the mixed waste grout containers is 60% complete.

The 300 Area Liquid Effluent Facility received and processed eleven 33-gallon drums of sodium hydroxide, which results in avoidance of a $31.6K disposal cost. Additionally, eight 55-gallon drums of sulfuric acid were unloaded into the 310 Facility sulfuric acid storage tank. This acid was excess product from the 200 Area Effluent Treatment Facility. Use of the excess acid will eliminate the need for disposal of the product as hazardous waste and result in a total savings of $108K.

Legacy Waste Container Leg 05 and four concrete lined drums of legacy waste buckets were shipped from the 327 Building to the Central Waste Complex for storage. Additionally, seven Lead Lined Drums were loaded with waste buckets, dry storage samples, fissile inventory and pin tubes. The last 7 cans of retrievable non-fissile material and four fissile cans were removed from dry storage. All remaining fissile pieces from D Cell (4.0 grams) and E Cell (4.5 grams) were transferred to F cell for consolidation.

Most activities are complete in support of closeout of the B Plant Memorandum of Agreement. There are a few issues remaining, to include the aerosol challenge test of the north filter train and restart of the B Plant exhaust system by July 28, 2000.

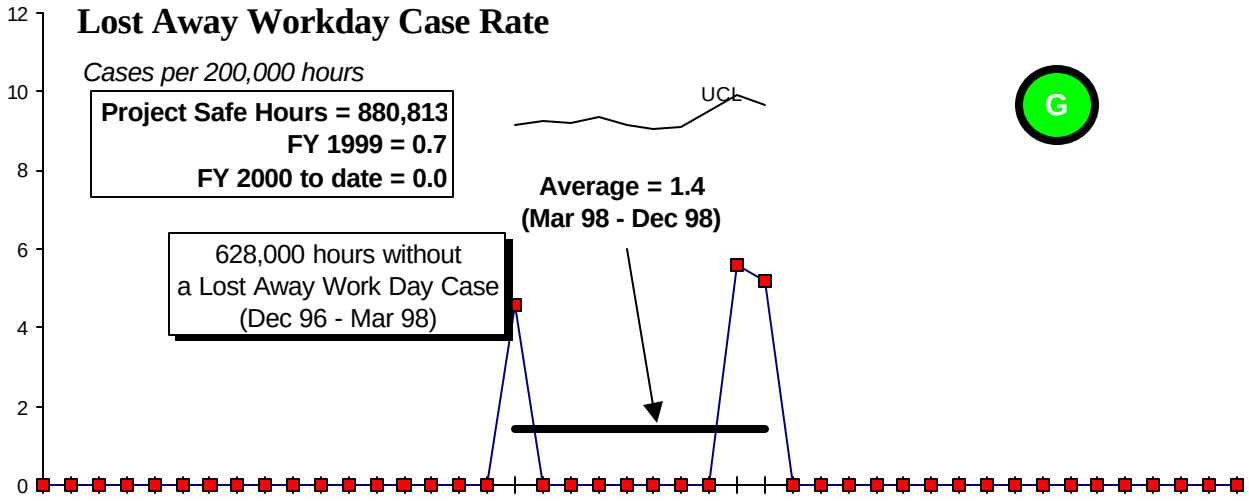
Reviews with the 300 Accelerated Closure Plan (ACP) Board of Directors and an Independent Cost Estimating (ICE) team were held on May 25 and June 12 and 13 respectively. Both reviews were well received and specific feedback was provided. Comments generated by the review are being incorporated into the 300 ACP. The plan is on schedule to be transmitted to RL on June 29, 2000.

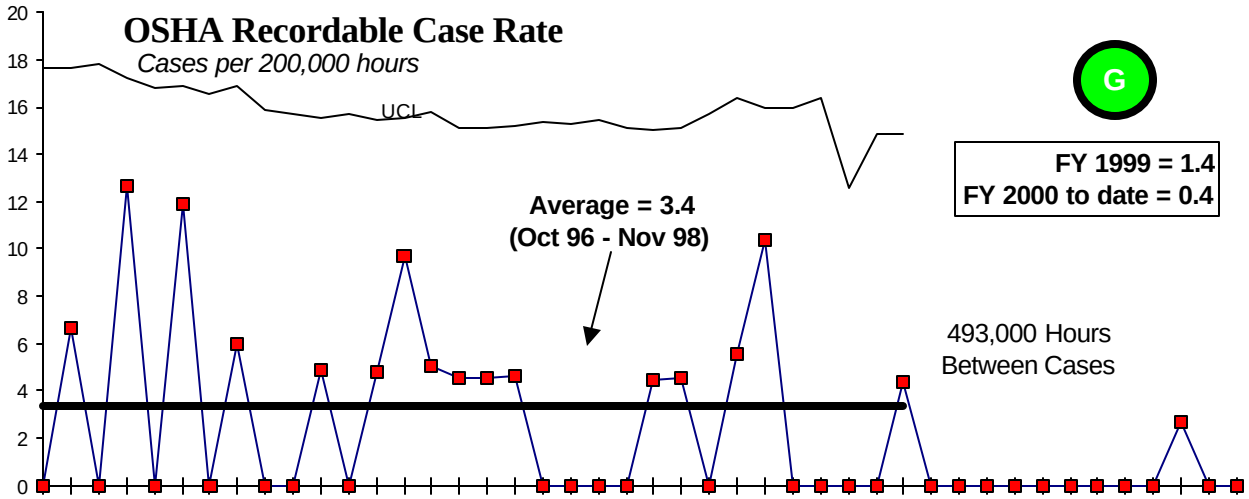
An Advance Work Authorization for $295K supporting Uranium Disposition was approved. The AWA will fund painting of the T-Hoppers, Criticality Safety Evaluation Report reviews, and initial shipments of T-Hoppers to Portsmouth, Ohio.

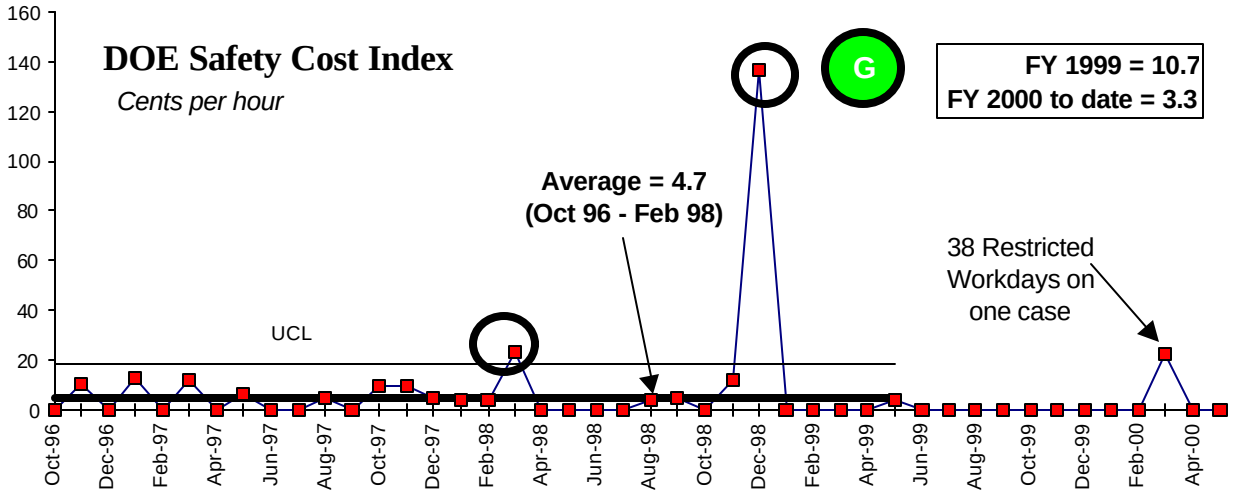
The Interim Safety Basis, Interim Operational Safety Requirements, and hazard classification documents for the Fuel Supply Shutdown facility were approved by RL.

SAFETY

Significant decreases in Occupational Safety and Health Act (OSHA) recordable case rate and in DOE Safety Cost Index have recently occurred. The project has exceeded 750,000 hours without an OSHA recordable. The project has an overall green rating - stable at excellent rates.


Lost Away Workday Case Rate
Cases per 200,000 hours
Project Safe Hours = 880,813
FY 1999 = 0.7
FY 2000 to date = 0.0
UCL
G
Average = 1.4
(Mar 98 - Dec 98)
628,000 hours without
a Lost Away Work Day Case
(Dec 96 - Mar 98)
12
10
8
6
4
2
0


OSHA Recordable Case Rate
Cases per 200,000 hours
UCL
G
FY 1999 = 1.4
FY 2000 to date = 0.4
Average = 3.4
(Oct 96 - Nov 98)
493,000 Hours
Between Cases
20
18
16
14
12
10
8
6
4
2
0

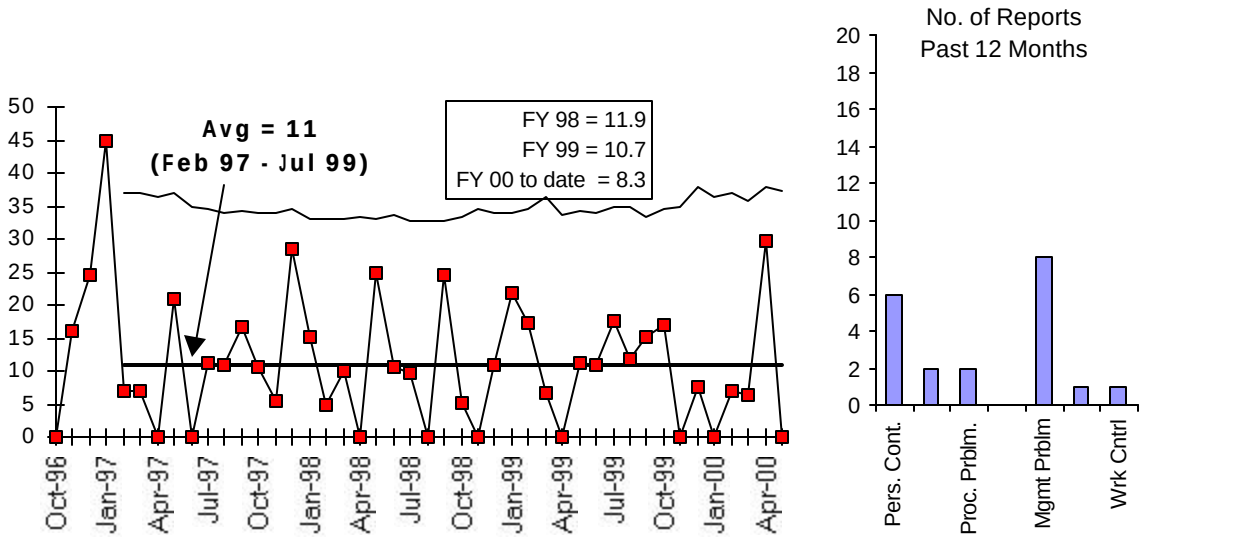

DOE Safety Cost Index
Cents per hour
G
FY 1999 = 10.7
FY 2000 to date = 3.3
Average = 4.7
(Oct 96 - Feb 98)
38 Restricted
Workdays on
one case
UCL
160
140
120
100
80
60
40
20
0
Oct-96
Dec-96
Feb-97
Apr-97
Jun-97
Aug-97
Oct-97
Dec-97
Feb-98
Apr-98
Jun-98
Aug-98
Oct-98
Dec-98
Feb-99
Apr-99
Jun-99
Aug-99
Oct-99
Dec-99
Feb-00
Apr-00

CONDUCT OF OPERATIONS / ISMS STATUS

CONDUCT OF OPERATIONS

Green

EVENTS PER 200,000 HOURS



Green

ISMS STATUS

- ISMS Internal Readiness Review (IRR) completed; closure plan in progress
- Phase I Verification successfully completed April 28, 2000
- Declared Readiness for ISMS Phase II Verification May 2, 2000
- ISMS Phase II Verification scheduled for June 21-27, 2000

BREAKTHROUGHS / OPPORTUNITIES FOR IMPROVEMENT

Breakthroughs

Green

- **Savings Through Alternative Disposition Strategy** - Final disposition of Unirridiated Uranium fuel elements to low-level waste burial grounds vs. packaging and transportation to Portsmouth, Ohio for interim storage will save in excess of $1M over the current Project Management Plan cost baseline.

Opportunities for Improvement

Green

- **324 Project Planning / Execution:** An emphasis on improved schedule management to ensure that critical path negative float is recovered to positive float continues. Critical path method analysis of baseline schedule has lead to several schedule sequence changes devised to improve baseline performance. As work progresses, the need to re-sequence will continue to be assessed.

- **Accelerate 384 Powerhouse Demolition** - Revise existing DynCorp request for proposal for 200 Area Powerhouse demolition to include 384 Powerhouse and make it first priority.

UPCOMING ACTIVITIES

- **Integrated Environmental, Safety & Health Management System (ISMS) ¾** Complete verification of Phase II readiness activities by June 2000.

- **300 Area Accelerated Closure Project Plan ¾** Prepare and issue the 300 Area Accelerated Closure Project Plan, schedule and estimate June 29, 2000.

- **B Plant Transfer to ERC ¾** Complete closeout activities by July 28, 2000.

- **300 Area Waste Acid Treatment System (WATS) Resource Conservation and Recovery Act (RCRA) Closure Activities ¾** The final report due to RL has been delayed until September 2000 due to the review and comment cycle with Washington Department of Ecology (WDOE). A baseline change request has been submitted to delete the milestone, TRP-99-301, "*Submit Final Report on WATS Closure Activities to RL.*"

- **TPA Milestone M-89-02 ¾** Complete Removal of 324 Building Radiochemical Engineering Cell (REC) B Cell Mixed Waste (MW) and Equipment by November 2000.

COST PERFORMANCE ($M):

	BCWP	ACWP	VARIANCE
River Corridor Project	$39.6	$37.0	$2.6

The $2.6 million (7.0 percent) favorable cost variance is within the established threshold. Further information at the PBS level can be found in the following Cost Variance Analysis details.

SCHEDULE PERFORMANCE ($M):

	BCWP	BCWS	VARIANCE
River Corridor Project	$39.6	$39.1	$.5

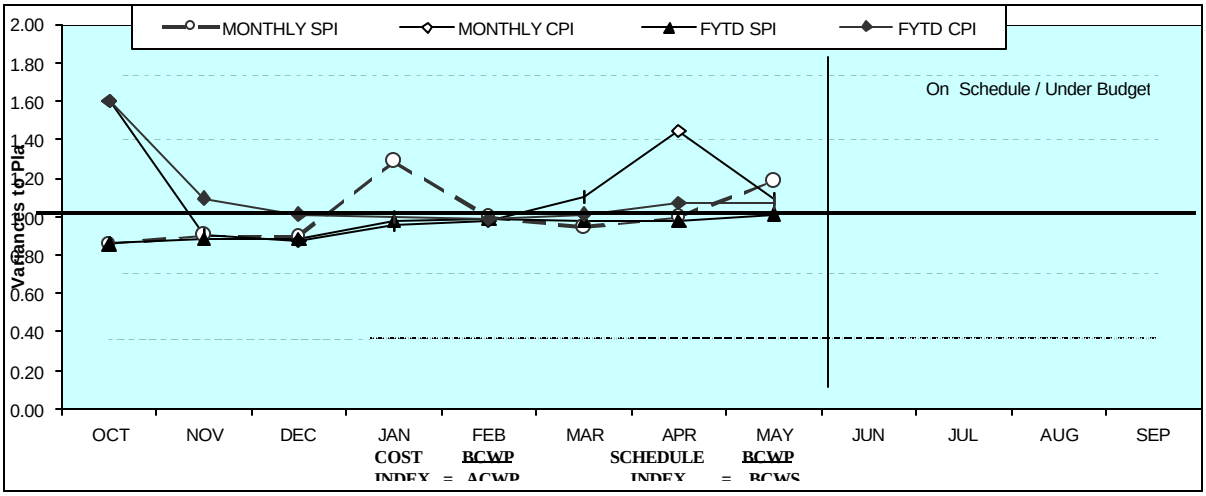
The $0.5 million (1.0 percent) favorable schedule variance is within the established threshold. Further information at the PBS level can be found in the following Schedule Variance Analysis details.

FY 2000 Cost/Schedule Performance – All Fund Types Cumulative to Date Status – ($000)

By PBS		FYTD BCWS	BCWP	ACWP	SV	%	CV	%	PEM	FYSF	EAC
PBS TP01 WBS 1.4.1	B-Plant	$ 340	$ 340	$ 489	$ 0	0%	$ (149)	0%	$ 350	$ 521	$ 521
PBS TP04 WBS 1.4.4	300 Area/ Special Nuclear Materials	$ 1,797	$ 1,796	$ 1,682	$ (0)	0%	$ 115	6%	$ 2,697	$ 3,150	$ 3,150
PBS TP12 WBS 1.4.6	Transition Program Management	$ 11,292	$ 11,254	$ 9,657	$ (37)	0%	$ 1,597	14%	$ 16,792	$ 14,477	$ 14,477
PBS TP10 WBS 1.4.8	Accelerated Deactivation	$ 1,402	$ 1,404	$ 1,420	$ 2	0%	$ (15)	-1%	$ 2,107	$ 3,359	$ 3,359
PBS TP08 WBS 1.4.10	324/327 Facility Transition	$ 22,427	$ 22,820	$ 22,226	$ 393	2%	$ 594	3%	$ 35,513	$ 34,846	$ 34,966
PBS TP14 WBS 1.4.11	Hanford Surplus Facility Program (300Area Revitalization)	$ 1,848	$ 1,986	$ 1,484	$ 138	7%	$ 502	25%	$ 2,862	$ 2,581	$ 2,581
	Total	$ 39,105	$ 39,601	$ 36,958	$ 496	1%	$ 2,643	7%	$ 60,322	$ 58,934	$ 59,054

Note: RL-Directed costs (steam and laundry) are included in the PEM BCWS. 310 TEDF/340 Facility performance data is reported under PBS WM05 (Waste Management).

Cost/Schedule Performance Indices (Monthly and FYTD)



FY 2000	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MONTHLY SPI	0.86	0.90	0.89	1.29	1.00	0.94	0.99	1.19				
MONTHLY CPI	1.60	0.90	0.87	0.96	0.98	1.10	1.44	1.09				
FYTD SPI	0.86	0.88	0.89	0.98	0.98	0.97	0.98	1.01				
FYTD CPI	1.60	1.10	1.01	0.99	0.99	1.01	1.07	1.07				
MONTHLY BCWS	$3,649	$5,158	$4,089	$3,855	$4,290	$5,980	$5,433	$6,651	$5,166	$4,704	$6,150	$5,197
MONTHLY BCWP	$3,131	$4,646	$3,654	$4,973	$4,270	$5,635	$5,398	$7,894				
MONTHLY ACWP	$1,954	$5,141	$4,195	$5,206	$4,357	$5,135	$3,750	$7,221				
FYTD BCWS	$3,649	$8,807	$12,896	$16,751	$21,041	$27,021	$32,454	$39,105	$44,271	$48,974	$55,125	$60,322
FYTD BCWP	$3,131	$7,777	$11,431	$16,404	$20,674	$26,309	$31,707	$39,601				
FYTD ACWP	$1,954	$7,095	$11,290	$16,496	$20,853	$25,988	$29,738	$36,958				

Cost Variance Analysis: (+$2.6M)

WBS/PBS **Title**

1.4.1/TP01 **B Plant**

Description and Cause: The unfavorable cost variance is the result of a partial implementation of approved BCR FSP-2000-008 in HANDI.
Impact: No impact.
Corrective Action: Implementation of BCR FSP-2000-008 will be completed in June.

1.4.6/TP12 **Transition Project Management**

Description and Cause: The favorable cost variance is primarily due to the Fluor Project Management Team re-structuring which has mapped personnel from the sub-project to other sub-projects (i.e. Nuclear Material Stabilization), resulting in underruns in labor and contractor support.
Impact: No impact.
Corrective Action: Although this PBS reflects a substantial cost variance, the funding is less than the scope.

1.4.11/TP14 **HSFP 300 Area Revitalization**

Description and Cause: The favorable cost variance is primarily due to lower than planned costs in associated with Accelerated Closure Plan activities.
Impact: No impact.
Corrective Action: Any underruns in funding will be utilized to support super stretch activities and emerging work scope.

All other PBS variances are within established thresholds.

Schedule Variance Analysis: ($0.5M)

All PBS variances are within established thresholds.

Issues

Technical Issues

Nothing to report.

DOE/Regulator/External Issues

Issue: Approval by DOE-HQ of the Unirradiated Uranium (UU) billet Safety Analysis Report for Packaging (SARP), Revision K, is required by July 15, 2000. Performance Initiatives encourage the accelerated disposition of this material; however, review and approval time frames do not support attempts to accelerate shipments.

Impact: Failure to gain approval on or before July 15, 2000 will jeopardize the shipment schedule for the billets thus losing the opportunity to complete the billet transfer in FY 2000. Performance Incentive RC3-SS Uranium Disposition will be impacted by the inability to ship billets in FY 2000.

Corrective Action: DOE-RL is aware of the issue. DOE-HQ has initiated the review and approval process. Approval is expected by July 15, 2000.

BASELINE CHANGE REQUESTS CURRENTLY IN PROCESS ($000)

PROJECT CHANGE NUMBER	DATE ORIGIN.	BCR TITLE	FY00 COST IMPACT	SCH	TECH	DATE TO CCB	CCB APR'VD	RL APR'VD	CURRENT STATUS
FSP-00-002	11/2/99	Mark-42 Project Completion	$0		X	04/05/00			In review cycle with FH CCB
FSP-00-022	1/31/00	327 Accelerated Deactivation	$4,573	X	X	04/05/00	04/07/00	05/19/00	Approved
FSP-00-031	3/22/00	Revisions to Milestones TRP-99-907 & TRP-99-909	$0			04/05/00	04/13/00	05/16/00	Approved
FSP-00-034	3/24/00	Delete Milestone TRP-99-301	$0			04/05/00	04/13/00	05/16/00	Approved
FSP-00-039	4/21/00	HEPA Filter Vulnerability Assessment	$0		X	N/A	N/A	N/A	Project approval 6/1/00
FSP-00-042	5/4/00	Prepare Engineering Evaluation/Cost Analaysis	$40		X	N/A	N/A	N/A	Project approval 5/22/00
FSP-00-046	5/24/00	Remove FEB Activities from FY2000	-$277		X			N/A	In development
FSP-00-047	5/24/00	Rebasline PBS #RL-TP10 "Accelerated Deactivation"	$0	X	X				In development
FSP-00-048	6/5/00	RL/HQ Moratorium on Transfer of Facilities	$0	X					In development
ADVANCE WORK AUTHORIZATIONS									
AWA	6/1/00	Uranium Dispostion Project activities	$295		X	6/5/00	6/5/00	06/07/00	BCR in development

MILESTONE ACHIEVEMENT

MILESTONE TYPE	FISCAL YEAR-TO-DATE				REMAINING SCHEDULED			TOTAL FY 2000
	Completed Early	Completed On Schedule	Completed Late	Overdue	Forecast Early	Forecast On Schedule	Forecast Late	
Enforceable Agreement	1	0	0	0	0	0	0	1
DNFSB	0	0	0	0	0	0	0	0
DOE-HQ	0	0	0	0	0	0	0	0
RL	2	1	0	1	0	0	0	4
Total Project	3	1	0	1	0	0	0	5

Tri-Party Agreement / EA Milestones
M-92-13 (TRP-00-902), " Submit 300 Area SCW Project Management Plan to Ecology Pursuant to Agreement Action Plan Section 11.5," due 9/29/00 • Completed 6 months early (3/28/00).
M-92-14 (TRP-02-901), "Complete Removal of Phase I 300 Area Special Case Waste and Materials," due 9/30/02 • Completed 30 months early (03/28/00) pending acceptance of the plan by Ecology.
M-89-02 (TRP-99-901), "Complete Removal of 324 Building Radiochemical Engineering Cells (REC) B Cell Mixed Waste (MW) and Equipment," due 11/30/00 • Work towards completion of M-089-02 continues on schedule.
DNFSB Commitments
Nothing to report.

MILESTONE EXCEPTION REPORT

Number/WBS	Level	Milestone Title	Baseline Date	Forecast Date

OVERDUE – 1

TRP-99-933 **RL** Containerize Dispersible Under 2A Rack 04/30/00 07/06/00
1.4.10
Cause: It has been determined it is more efficient to complete dispersible collection once size reduction of miscellaneous items is completed.
Impact: No impact.
Corrective Action: No corrective action is required.

FORECAST LATE – 0

FY 1999 OVERDUE – 1

TRP-99-800 **RL** End Point Improvement Method 06/25/99 To Be Deleted
1.4.8
Cause: Resources necessary to complete this milestone were diverted to other priority work. This milestone represents an enhancement in Facility Stabilization Project's ability to plan deactivation work, but it is not essential.
Impact: No impact. This work scope is independent of the PMBS critical path and does not impact any schedule.
Corrective Action: Deletion of this milestone is included in the BCR which re-baselines TP-10 and is currently in development.

PERFORMANCE OBJECTIVES

Green

Outcome	Performance Indicator	Status
Restore the River Corridor for Multiple Uses	FDH-RC-2 Accelerate 324/327 Deactivation.	On track – no issues. Current Life Cycle Schedule Variance .4% and Life Cycle Cost Variance .6%.
	FDH-RC-2SS Continue Acceleration of 324/327 Deactivation – Complete 327 Facility accelerated deactivation activities by September 2000.	Issues related to revised Safety Analysis Report for Packaging may jeopardize this PI. Alternatives have been evaluated, and a contingency plan results in a $205K cost increase and a schedule delay of 4 - 8 weeks.
	FDH-RC-3SS Disposition Uranium Complete disposition of ~1865 Metric Tons (MT) of Hanford Uranium by September 2000.	At risk - FH has identified $295K for continuation of project activities. There are minimal constraints to accomplish this work; however, funding is an issue. An alternative strategy has been proposed to RL that supports completion of the Uranium Disposition.
	FDH-RC-5SS Accelerate 300 Area Closure Project.	On track – No issues.
	FDH-RC-5SS-2 Accelerate Cleanup of zone 4 of 300 Area	Unrecoverable – No funds identified to support completion of physical work. Engineering Evaluation/Cost Estimate is in process.
Multiple	Comprehensive performance	All baseline work projected to be complete per PI requirements.

KEY INTEGRATION ACTIVITIES

- Complete National Facility Deactivation Initiative (NFDI) DOE-complex implementation plan.

- The RCP 324 Building B Cell project, along with Spent Nuclear Fuel (SNF), developed an alternative plan for the fuel removal activity. Agreement to use a longer inner canister for the fuel permits greater end shielding and allows manual welding and testing in the Cask Handling Area (CHA), rather than the more expensive, remote effort in B Cell. SNF and RL are reviewing the options study to determine cost savings against the 200 Area Interim Storage life cycle costs. Following the review, a memorandum of agreement will be issued documenting the interface between SNF and RCP.

- The DOE-HQ-funded study of High-Level Vault Tank 105, located in the 324 Building is being conducted by AEA Technologies to demonstrate new technology in the deactivation of high-dose radioactive tanks. The project technical plan, implementation plan, and the draft of the alternatives assessment are complete. Comments have been forwarded to AEA Technologies and have been incorporated into the assessment. The final report will be issued by June 23, 2000. A mock-up demonstration of the selected technology is to be performed in August 2000.

- 300 Area Accelerated Closure Plan team has been formed with Fluor Hanford, Bechtel Hanford, Inc. and Pacific Northwest National Laboratory participating. The planning effort is on schedule to support a June 29, 2000 transmittal date to RL.

- River Corridor Project (RCP) contributed to a Pacific Northwest National Laboratory (PNNL)-sponsored technical review on deactivation and decommissioning with two senior members from the WAK Facility located in Karlsruhe, Germany on June 8, 2000. As part of a Hanford site tour, RCP provided an overview presentation on the 324 Deactivation Project, followed by a facility tour. A presentation was also given in the deactivation progress and challenges at the Karlsruhe facility.

- In collaboration with Bechtel Hanford, Inc. (BHI), plans are being developed to demonstrate the use of a 3-D GAMMA camera in the 324 and/or 327 buildings in late June.

- RCP participated in a demonstration of wearable computers developed by a German based company called Xybernaut. The Xybernaut systems provide miniaturized, voice-activated audio/visual for improving field productivity and safety. The systems allow for mobile access to databases of manuals, procedures, drawings, video training, and numerous other applications.